The Maryland Fruit Grower

Published Monthly by the Maryland State Horticultural Society

Edited by the Secretary, A. F. Vierheller, Extension Horticulturist

Vol. 7 **June, July, 1937** **No. 6-7**

APPALACHIAN APPLES

The 1937-38 apple advertising campaign under Appalachian Apples, Inc., is on. Virginia has had a series of meetings and have signed up quite a few new members. West Virginia has sent out letters and the response is encouraging. Pennsylvania is in the midst of their sign-up work. Maryland will attempt to handle the whole affair by letters to growers. Last year, the meetings were poorly attended, and anyway, there isn't a lot of explaining to be done.

Last year, the growers of the four States carried out the work as outlined, and realized the budget of $19,000 and the advertising work that was done with that money was really creditable. Best of all, the ground work was laid, and we learned a lot of things to do, and not to do. This year, with a new advertising firm to handle the thing, and with the last year's organization intact, the whole program should go through with excellent results.

There is little to be said about advertising. It pays. Consider the staggering sums spent by big companies to sell their well-known products. This year, Idaho is advertising all of their farm products. The lettuce growers are advertising this year. Can apple growers afford to be indifferent to advertising? With the shrinkage of foreign outlets, we have more apples to sell at home. People must be TOLD about apples, or they will buy substitutes. We have no hard feelings for the growers of these substitutes, so maybe we can convince the housewife that apples are just a good addition to any diet. Anyway, we want to tell them about APPLES that we grow here in the Four States section, or just APPLES, but especially OUR APPLES.

That brings up the NATIONAL advertising plan that some growers desire. The International Apple Association, a splendid organization of apple growers and handlers, made a survey and seemed to find that the time is not yet here for the NATIONAL plan. The best plan, then would be to build up the 5 regional organizations, and try to merge them later.

As is likely known to all growers, the Appalachian plan calls for growers to subscribe 1 cent a bushel on their prospective crop of apples of U. S. Utility grade and better, or $10.00 per thousand bushels. This is merely to give some idea of the money likely to be available. Payment is made *only* on actual sales or production of these grades, so that the grower may change his estimate at any time, if he is above or below his original estimate. This allows for damage by hail, insects, or disease that may later reduce the crop.

It will be noted that the subscription per bushel has been raised from ½ cent to 1 cent a bushel. There was very little objection to this, as many growers last year were strong for a 1 cent subscription. The idea is to raise

a budget of $65,000 if possible. It takes money for effective advertising.

Perhaps some growers have not received letters and subscription blanks. Don't let that interfere with your enthusiasm. Just write a post card to A. F. Vierheller, College Park, Md., and subscription blank will be sent. Remember, no amount is too small to subscribe, whether it be 100 bushels or 10,000 bushels. We want all growers possible to contribute in spirit as well as in money. Some one has said that we must either sell more apples, or chop out trees. It costs less to advertise our apples than it does to cut out trees. Anyway, it's worth the attempt. Let's try it. SUBSCRIBE NOW. *Every apple grower* should support this movement.

MORE ABOUT TREE REPAIR

The Bimonthly Bulletin, January-February, 1937, Volume 22, No. 184, published by Ohio Agricultural Experiment Station, Wooster, Ohio, contains a short write-up on repair of injured apple trees, in which tree repair, and treatment of wounds is briefly discussed. As a summary of this article, it may be said that bichloride of mercury 1 part to 1000 parts of water, or copper sulfate 1 pound to 3 gallons of water were suggested for disinfecting wounds before painting, where there was danger of disease infection. For wound dressings, white lead and linseed oil paint was found satisfactory. Grafting wax was also good, but must be removed, due to cracking. Water glass (sodium silicate) at the rate of 3 parts of water glass to 1 part of water has given good results. Commercial creosote and asphalt in equal proportions made a good dressing. Creosote and coal tar were not tried, but rumors were that this mixture had caused some tree injury. No matter what dressing was used, it was suggested that it be renewed (recoated) annually until new callus growth is well under way. It was recommended that wounds over 1½ inches be painted with some material. Bridge grafting was suggested for girdled trees. In cases where this was not practical, the use of several 2 to 3 year old trees planted around the injured tree, and grafted or "inarched" into the injured tree several inches above the injured section, was practical. It was necessary to place these grafts in early spring, and to clean and disinfect the injured areas.

The cleaning of cavities may be an expensive process, depending upon the size of the cavity, commercial value of the tree, and the probable life of the tree. However, if such repair is attempted, the cavity should be cleaned of all diseased wood, then tamped full of concrete. The concrete is made by using 1 part dry cement, and 3 parts of sand, with water added to make a stiff mortar. Fill the cavity slightly less than flush with the cambium layer. Before drying, smooth over the surface of the concrete with a thin coat of paste made by mixing cement and water. Cover the exposed edge of the bark with some sort of wound dressing, or grafting wax. Bolting and bracing are also briefly discussed in the article. The use of natural braces made by twisting or interlacing two waterspouts or small branches on the inside surface of two opposite branches was found to be a good form of bracing. Later, these interlaced branches grow together. Many trees in Maryland are braced in this way, and the results are excellent for strengthening weak crotches.

How's the new budget working?

Terrible. I spend so much time trying to keep within the budget that I don't have time to do any work.

CEDAR RUST CONTROL

In Bulletin No. 678, published by N. Y. Agricultural Experiment Station, Geneva, Dr. J. M. Hamilton states that cedar rust of apple is somewhat controlled by the use of regular sprays, but in serious cases, extra sprays of wettable sulphurs, applied thoroughly, and just before rains will control the rust. In Maryland, the regular sprays have some effect, but we cannot predict when rust will be serious, so extra sprays have not been recommended. Dr. Hamilton states, however, that the best control is to remove all red cedars within a half mile of the orchard. This agrees with recommendations made in the Cumberland-Shenandoah area. The cedar rust organism lives one year on the apple, and two years on the red cedar, then comes back to the apple. It will be remembered that 1936 was a serious rust year in some parts of Maryland. In New York, it was found that Milton, McIntosh, and Cortland apples were rather resistant to cedar rust.

APPLES AND HEALTH

Dr. Ira A. Manville, Director of the Nutritional Laboratory, University of Oregon Medical School, has found that powdered apple is of great value in treatment of summer complaint and stomach ills of babies. Apples are high in Vitamin A, which prevents the breakdown of mucous membranes. In addition, he found that uronic acid in the apple was of value in destroying toxins or poisons in the body. It is understood that there is also to be a new breakfast food-puffed aplets-manufactured in the Northwest apple section. All of these things help in opening up new markets for apple products.

"Hey, Bill."
"Yeah."
"Are you all right?"
"Yeah."
"Then I shot a bear."

Can We Be Of Assistance?

East Central Fruit Growers Production Credit Association

Hagerstown, Maryland

Organized for benefit of Fruit Growers in their financial production operations

Organized under the Farm Credit Act of 1933 as a permanent institution for benefit of fruit growers in their financial production operation. Serves the states of Delaware, Maryland, Pennsylvania, Virginia and West Virginia.

A GROCER BUYS SOME APPLES

We are getting ready to advertise our apples. That means that we must pack a product that will cause people to come back and buy more. The only weakness in any advertising plan is that somebody may get careless and pack a product that brings no credit to the apple industry. Such things will happen unless the packing crew is well supervised. Some growers are surprised when they see some of their fruit in the market. It takes money to do good advertising, but it is not hard to get plenty of free, and unfavorable publicity when a customer feels that he has been deceived.

The following article is a true story, taken from "Hoosier Horticulture," March 1937, and shows a type of free advertising that is most costly in the end. This is not meant as a slur to Indiana apples, for it can, and does happen in other states. The article "A Grocer Buys Some Apples" was written by K. I. Fawcett, and should cause us to look to our packing operations:

"I operate a first-class retail grocery and am always in the market for apples. We handle lots of boxed stuff from the Northwest and quite a few bushels grown in Michigan, but Indiana apples have a flavor all their own, and I like to sell home-grown products."

"Another reason why I like to buy Indiana apples is because the State passed a law a few years ago that says the growers' name, address, and variety, and minimum size of the contents must be stamped on the lid of each product. Somebody told me the law is in accordance with Federal Grades for apples, and that not over 10% total defects by weight is allowed in U. S. No. 1 or Fancy marked apples, and 5% is allowed for undersize in the same grades. A grower can put three or four pounds of off-grade apples in a bushel of No. 1's and still be within the law. I can handle these three or four pounds O. K., but if it runs much over that I may not come out on the apples.

"For two years I have bought all the apples which the Horticultural Department of Purdue has exhibited at the annual meeting of the Indiana Horticultural Society. (This Society is the same kind of an organization as our Retail Grocers' Association.) They buy as many bushels of Indiana grown apples as they can get and never even look at them until the exhibit is ready to open. Personally I like to know what is in the bottom of the basket before I put any money out, but all they want is what the grower says they are, stamped on the lid. This year they had several bushels on exhibit and the stuff looked real nice when the lids were removed. I never saw a name on any basket but each basket did have a number and somebody knew who produced and packed each one.

"I was told that the twenty-five baskets in the exhibit cost $43.75, and I started figuring how much I could pay for the lot. I could give $43.75 for the twenty-five bushels and still make a profit if the apples were something like the ones I saw in the faces of the baskets. Another reason I could give what the Department had paid for them was that the apples would be repacked and all the rots taken out before I sent the truck after them. I would have $1.75 a bushel tied up in them.

"I never said anything about price because I knew all these apples would be graded by a Federal Inspector and his report would show what was in the baskets; then I could make a deal.

"The next morning the apples had been graded and cards giving the results had been placed on each basket. It was hard to believe as I walked along the tables that the apples I saw were the same as those I saw in the baskets the day before. One card showed 23% undersize, another 6%, one 70% off-color, another grossly misbranded. I rubbed my eyes and passed along. I had seen *nothing* so far. Cards at the end showed 92% undersize; 43% undersize; 100% off-color. I couldn't be looking at U. S. No. 1 apples, but the cards marked according to the basket lids must be right. One basket met the grade; another 70% off-color; one 47% undersize. I suddenly realized that I had agreed to buy those apples. Was I glad that I didn't mention price!

"They were my apples; I'd bought them, so I looked closer and did some more figuring. Twenty-five bushels, 19 of them marked U. S. No. 1 or better. I even saw one marked Extra Fancy. Somewhere along the line I had seen two bushels where the cards were marked 'Grade O. K.' I looked for more and found one. Three bushels out of twenty-five graded U. S. No. 1. If I had bought one hundred bushels of the same kind of apples I would have had twelve that met the grade. Nineteen growers had stamped their names on basket lids and on the same lids, U. S. No. 1, but only three bushels were what the growers said they were. Hard to believe; but I had bought the apples and the next best thing to do was to get them as cheaply as possible.

"I knew what was in each basket so did the fellow who was selling them. At one time I would have paid $1.75 but not now. By this time scald and internal breakdown were showing up badly and the apples would have to be moved. I was asked what I would pay for the lot, and my top price was $1.00 per bushel after the worst stuff was sorted out.

"The apples were brought up to the store and one of the clerks checked the load and reported only nineteen bushels. Something had happened to six bushels, because I had counted twenty-five after I had seen that I was hooked.

"The seller came in for his money the next morning, and I asked why he had sent up only nineteen bushels. He reluctantly explained that after the rots, worst scald, and apples he felt ashamed to put in the basket had been sorted out only nineteen bushels were left. Before they finally went out over the counter I wished that they had been sorted to five or six.

"Had these apples been marked in accordance to Federal Grades, markings of U. S. Commercial, U. S. Utility and Unclassified would have been the correct terms. The price would have corresponded to the grade and nobody would have taken such a loss.

"This whole story can be written in one sentence: Twenty-five bushels of Indiana apples, nineteen of which were marked U. S. No. 1 were originally bought for $43.75; after all the culls and rots were sorted out, nineteen bushels were resold for $19.00, a loss of $24.75, and not a cent was charged to sorting, repacking or delivering them to my store."

ANOTHER INSECTICIDE

In the March 1937 Maryland Fruit Grower, a new spray material, pheno-thiazine was discussed, as a new hope for codling moth to replace lead

arsenate. It was found, however, that the material was irritating to the skin of the spraymen, and affected fruit color. Dr. W. S. Hough reported before the New Jersey State Horticultural Society that he had used a new contact insecticide reported in Journal of Economic Entomology, Vol. 29, pages 52-65. This material is called di-nitro-o-cyclo-hexyl-phenol. It may replace tar distillate oils, as a control for aphis, and also seems to control San Jose scale. His results, using about 6 ounces of material in 100 gallons of oil spray applied during March indicated that this material was as effective as a 2% tar-distillate oil applied at the same time. It was not as effective in fall applications, as in spring, and when used in December, about twice the amount of material was necessary for the same results as the March application. The material was not advised for delayed dormant use, as it injures buds. This new material, di-nitro-o-cyclo-hexyl-phenol, is pleasant to use, causing no skin irritation, and apparently increases effectiveness of oil sprays scurfy scale and San Jose scale. In price, it is probable that this new mixture may compare favorably with that of petroleum oil and tar distillate mixture. Dr. Hough described a method that growers may use in emulsifying this material in their own spray tanks. The oil should be purchased containing the chemical, and for making 100 gallons of the emulsified spray, the following directions are given: Add water until the agitator is almost covered. With the agitator running, add 4 ounces of Goulac (or 8 ounces of glutrin) and 12 ounces of bentonite. As soon as the Goulac-bentonite emulsifier is mixed with the water, add amount of oil necessary for 100 gallons of diluted spray. Then pump this mixture back into the tank until completely emulsified, and add water to make 100 gallons. This spray has not been recommended to Maryland growers, and is given here merely for growers' information.

A LIVE SCARECROW

H. A. Cardinell, Extension Horticulturist of Michigan Agricultural College, has devised a gun for frightening birds in Michigan cherry orchards. It is placed on a high pole, and by use of mechanism that allows water to drop on calcium carbide, gas is formed, which explodes at intervals, making a noise that seems to be effective in keeping birds away. A bulletin describing this machine may be had by writing Michigan Agricultural Experiment Station, East Lansing.

PEACH BULLETIN

Bulletin 606 entitled "Some Studies of the Degree of Maturity of Peaches at Harvest in Relation to Flesh Firmness, Keeping Quality, and Edible Texture" has been issued by the New Jersey Agricultural Experiment Station, New Brunswick, New Jersey. This bulletin discusses changes in chemical and physical make-up of peaches during ripening; pressure testing and maturity; standards of ripeness; relation of nitrogen fertilizer and other factors, to market quality; and effect of soil and humidity upon flesh firmness.

Salesman: Look how she shines, and listen to that horn.

Farmer: Yes, my old cow shines, has two horns, and can make a noise like that—and she gives milk besides.

WHAT'S THIS?

Mr. J. B. Moore of Geneva (N. Y.) Station has been working with aphis control on vegetable plants. He found that apparently aphids were attracted to plants by light intensity as reflected by sprayed plants. There seemed to be more aphids on potato plants sprayed with Bordeaux Mixture. By dyeing lead arsenate and lime mixture for use on cabbage worms, a black color, he reduced the worm infestation on the cabbage. This may mean that in time, shall have colored spray materials for use in aphis control.

A REMINDER

When the Maryland State Horticultural Society was founded, thirty-nine years ago, its organizers intended that it should be a service organization, and also a social unit, to be of help in growers' problems and to bring growers closer togethere. Since that time, the officers have tried to make it an effective means of bringing to the growers the best information in helping to solve the many problems that have developed. No organization can function effectively without funds. The 1937 membership dues are payable, and funds are needed. For one dollar a year, members receive the Annual Proceedings, and The Maryland Fruit Grower. In these publications we attempt to bring to the growers anything of interest to them. We would appreciate any criticism, and maybe the publication can be made of more value. The Maryland Fruit Grower is supported by advertisers. We need more advertising. When the salesmen come around for your orders, ask them to advertise in this paper. Patronize our advertisers. Send in your membership dues. Become active in the organization. Do all of these things NOW. It is so easy to forget. Send your dues and suggestions to A. F. Vierheller, College Park, Md.

BULLETINS

Surface Irrigation in the Eastern States, Farmers Bul. 1635—1930. U. S. Dept. of Agriculture, Washington, D. C.

Soil Moisture and Irrigation Experiments in Eastern Apple Orchards.

Soil Erosion Control in Farm Operation. Special Bul. 170—1935. Minnesota Extension Service, St. Paul, Minn.

Raspberry Diseases. Circ. 133—1934. Pennsylvania Agr. Exp. Sta., State College, Pa.

Packing Minnesota Fruits for Market. Bul. 323—1935. Minnesota Agr. Exp. Sta., St. Paul, Minn.

Strawberry Culture in Illinois. Circ. 453—1936. Illinois Agr. Extension Service, Urbana, Ill.

Some Studies of the Degree of Maturity of Peaches at Harvest in Relation to Flesh Firmness, Keeping Quality, and Edible Texture. Bul. 606—1936. New Jersey Agr. Exp. Sta., New Brunswick, N. J.

Pruning and Care of Ornamental Trees and Shrubs. Bul. 172—1936. Michigan Agr. Extension Service, East Lansing, Michigan.

Peach Pointers. Bul. 171—1935. Purdue Extension Service, La Fayette, Indiana.

Don't Let Leaf Hoppers Destroy Your Fruit!

Add D-X To Your Next Spray

It costs but 75c per 100 gallons of spray to control leaf hoppers with D-X. This new spray is a boon to the fruit growers who have neglected their leaf hopper damage because of the high cost of nicotine. D-X costs ⅓ less.

D-X at 1 pint to the 100 gallons, may be combined with whatever you are using—lime sulfur, bordeaux, arsenate of lead, oil emulsion, sulfurs, etc. Dilution of 1 to 800 is sufficient, stronger concentration is futile, but spray thoroughly.

D-X in 5-gallon cans costs but $6.00 per gallon (which is 75c per pint). 1-gallon cans $7.50. All prices include delivery. D-X is a great aphis spray at less cost. Write for full information.

Citrus Spra-Cream

A Summer Emulsion For Codling Moth At Low Cost

for EVERY NEED PRATT'S OIL SPRAYS for EVERY PURSE

There is no more effective summer oil emulsion for spraying apples than Citrus Spra-Cream. It costs less too. Furthermore, you can always count on any oil made by Pratt being as safe as it is possible to make.

Citrus Spra-Cream is a stable emulsion with no danger of over-spraying. Contains 83% oil, costs but 35c per gallon delivered (plus returnable drum deposit). Prompt shipment. Write for further information.

B. G. Pratt Company

Dep't. F

50 Church Street **New York, N. Y.**